

IN THE SPECIFICATION:

Page 1, replace the paragraphs from lines 1-9 with the following amended paragraphs:

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The invention relates to a device and a method for determining the operating parameters of individual fuel cells or short stacks of fuel cells, preferably medium- temperature or high-temperature fuel cells. Thus, for instance, the operating parameters of solid oxide fuel cells (SOFC) or of molten carbonate fuel cells (MCFC) may be determined.

The invention also relates to a device and method for cooling hot process gases, which arise during the operation of fuel cells or during the testing of components of fuel cells systems, such as reformers, mixing or conditioning systems or catalysers, at a fuel cell testing station.

Page 1, lines 14-16 replace the paragraph with the following amended paragraph:

THE PRIOR ART

Devices and methods for the determination of individual cells or short stacks of cells serve to characterize or test fuel cells, for instance as regards their dependence on the temperature distribution over the cell surface.

Page 5, lines 1-10 replace the paragraph with the following amended paragraph:

SUMMARY OF THE INVENTION

The first object is achieved by the invention by providing that planar heating elements are pressed against one or preferably both exterior faces of the individual cell or the short stack, in parallel with the plane of the fuel cell, and that via these heating elements a given temperature T_H may be set for the fuel cell and that at least one operational parameter of the fuel cell is measured as a function of the temperature selected.

Parameters such as the temperature, current and voltage values, the composition of the process gases, the pressure of the process gases, but also the useful life of the fuel cell or individual components of the cell may be determined as a function of the temperature T_H or of its variation over time.

Page 8, lines 19-20, replace the paragraph with the following amended paragraph:

The invention will not be explained in more detail with reference to the enclosed drawings, wherein.

BRIEF DESCRIPTION OF THE DRAWINGS

Page 9, lines 11-14, replace the paragraph with the following amended paragraph:

Fig. 13 shows a fuel cell stack according to the invention in a longitudinal section; and

Page 9, lines 15-21, replace the paragraph with the following amended paragraph:

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Fig. 1 shows a measuring device 1 for single cells 2 of medium or high temperature fuel cells, preferably solid oxide fuel cells (SOFC) or molten carbonate fuel cells (MCFC). To simulate a given temperature curve planar heating elements 4 are placed parallel to the fuel cell plane ϵ at one, or preferably at both, exterior surfaces 3 of the single cell 2, which heating elements are connected to a control and evaluation unit 5 in order to set and regulate a given temperature.